

FEDERAL COURT OF CANADA

BETWEEN:

CITIZENS AGAINST RADIOACTIVE NEIGHBOURHOODS

Applicant

and

BWXT NUCLEAR ENERGY CANADA INC.

NOTICE OF APPLICATION

APPLICATION UNDER sections 18 and 18.1 of the *Federal Courts Act*

TO THE RESPONDENT:

A PROCEEDING HAS BEEN COMMENCED by the applicant. The relief claimed by the applicant appears on the following page.

THIS APPLICATION will be heard by the Court at a time and place to be fixed by the Judicial Administrator. Unless the Court orders otherwise, the place of hearing will be as requested by the applicant. The applicant requests that this application be heard in Toronto.

IF YOU WISH TO OPPOSE THIS APPLICATION, to receive notice of any step in the application or to be served with any documents in the application, you or a solicitor acting for you must file a notice of appearance in Form 305 prescribed by the *Federal Courts Rules* and serve it on the applicant's solicitor or, if the applicant is self-represented, on the applicant, WITHIN 10 DAYS after being served with this notice of application.

Copies of the *Federal Courts Rules*, information concerning the local offices of the Court and other necessary information may be obtained on request to the Administrator of this Court at Ottawa (telephone 613-992-4238) or at any local office.

IF YOU FAIL TO OPPOSE THIS APPLICATION, JUDGMENT MAY BE GIVEN IN YOUR ABSENCE AND WITHOUT FURTHER NOTICE TO YOU.

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F I L E D	FEDERAL COURT COUR FÉDÉRALE 5-JAN-2021 Respondent Imrana Ahmed
Toronto, ONT	1

February 5, 2021

"Imrana Ahmed"

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AND TO: Lisa Thiele, General Counsel
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Application

This is an application for judicial review in respect of the Canadian Nuclear Safety Commission's ("CNSC") licensing decision dated December 18, 2020 and communicated to the Citizens Against Radioactive Neighbourhoods ("CARN") on December 21, 2020, which renewed BWXT Nuclear Energy Canada Inc.'s ("BWXT") Nuclear Fuel Facility Operating Licence for its Toronto and Peterborough facilities for a period of ten years. In approving the licence, the CNSC determined that two facility-specific licences were required. This application is in respect of the licence for the Peterborough facility, which is valid from January 1, 2021 to December 31, 2030.

In licence conditions 15.1, 15.2 and 15.3 of the renewed licence for the Peterborough facility, the CNSC authorized BWXT to transfer the commercial production of uranium dioxide fuel pellets ("pelleting") from the Toronto facility to the Peterborough facility if it chose to do so, conditional upon BWXT submitting and implementing an updated environmental monitoring program and submitting a final commissioning report acceptable to the CNSC.

Subsection 24(4) of the *Nuclear Safety and Control Act*, SC 1997, c 9 ("NSCA") requires the CNSC to deny an application to renew a licence where the prescribed information is not provided, or if in their opinion, the licensee has not demonstrated that it will make adequate provision for the protection of the environment, the health and safety of persons, or measures required to implement international obligations to which Canada has agreed. The CNSC has unlawfully authorized BWXT to transfer its pelleting operations to Peterborough when those preconditions to licensing remain unfulfilled.

The Applicant makes application for:

1. An order declaring that:
 - a) the CNSC's issuance of licence conditions 15.1, 15.2 and 15.3 is invalid and unlawful because BWXT failed to fulfil the conditions for issuance of a licence pursuant to s.24(4) of the *NSCA*;
 - b) the CNSC's issuance of licence conditions 15.1, 15.2 and 15.3 is invalid and unlawful because BWXT failed to meet the licence application requirements in sections 3 and 6 of the *Class 1 Nuclear Facilities Regulations*, SOR/2000-204 ("Class 1 Regulations");
 - c) the CNSC's issuance of licence conditions 15.1, 15.2 and 15.3 is invalid and unlawful because the CNSC's decision did not meet the requirements of the As Low As Reasonably Achievable principle, contrary to the *Radiation Protection Regulations*, SOR/2000-203 ("*Radiation Protection Regulations*") and CNSC regulatory guidance;

(d) the CNSC's issuance of licence conditions 15.1, 15.2 and 15.3 is invalid and unlawful because the CNSC's decision did not meet the requirements of the principle of justification, contrary to subsection 24(4) of the *NSCA* and principles of international law;

(e) the CNSC's issuance of licence conditions 15.1, 15.2 and 15.3 is invalid and unlawful because the CNSC's decision did not meet the requirements of the precautionary principle, contrary to subsection 24(4) of the *NSCA* and principles of international law;

2. An Order quashing or setting aside licence conditions 15.1, 15.2 and 15.3 issued to BWXT by the CNSC on December 18, 2020;
3. An Order that the matter be returned to the CNSC for a new decision in accordance with the Court's reasons and directions;
4. An Order that all parties shall bear their own costs;
5. Such further and other relief as Counsel may advise and this Honourable Court may permit and deem just.

The grounds for the application are:

(a) Background

BWXT

6. The Respondent BWXT applied to the CNSC in 2018 to renew its Nuclear Fuel Facility Operating Licence for its Toronto and Peterborough facilities;
7. Both facilities are Class 1B nuclear facilities;
8. Currently, BWXT produces uranium dioxide fuel pellets at its Toronto facility and assembles fuel bundles for nuclear power reactors at its Peterborough facility;
9. In its licence application, BWXT sought authorization to produce uranium dioxide fuel pellets at its Peterborough facility for the first time;
10. BWXT's Peterborough facility is located in downtown Peterborough, in a residential neighborhood and adjacent to the elementary level Prince of Wales Public School;
11. Children are particularly vulnerable to toxic substances;
12. The facility is also located on the site of legacy environmental contamination;

13. BWXT's licence application did not include any plans for pelleting operations in Peterborough, including the equipment, processes, and activities that would occur at the facility for the first time if the request was granted;
14. BWXT's licence application did not include a proposed environmental monitoring plan, including examinations of potential hazards or releases specific to pelleting operations in Peterborough;

Citizens Against Radioactive Neighbourhoods ("CARN")

15. The Applicant CARN is a local organization concerned about impacts related to the emission of radionuclides and the health of communities and the environment adjacent to nuclear facilities;
16. CARN works to raise awareness about nuclear facilities and advocates for stringent human health and environmental safeguards;
17. CARN is particularly concerned about environmental threats from nuclear facilities to vulnerable populations, including children;
18. CARN was awarded funding by the CNSC pursuant to paragraph 21(1)(b.1) of the *NSCA* to review BWXT and CNSC documents with a focus on the environment and human health and to provide submissions to the CNSC in respect of the impugned licensing decision;
19. Members of CARN made written and oral submissions to the CNSC opposing BWXT's application;
20. CARN has a demonstrated interest in BWXT's Peterborough facility and the application to move pelleting operations to Peterborough in particular;
21. CARN asserts public interest standing to bring this application because it raises serious justiciable issues; the Applicant has a genuine interest in the outcome of this matter; and this Application is a reasonable and effective means in which the issues may be brought to this Honourable Court.

CNSC's Decision

22. On December 18, 2020, the CNSC issued two renewed operating licences to BWXT for a period of ten years, one for the Toronto facility and one for the Peterborough facility;
23. As part of the licence for the Peterborough facility, the CNSC authorized a change, allowing BWXT to move its pelleting operations to Peterborough, subject to new licence conditions 15.1-15.3:

15.1 The licensee shall submit and implement an updated environmental monitoring program at the Peterborough facility prior to the commencement of production of fuel pellets as described in paragraph (i) (a) and (iii) of Part IV of this licence.

15.2 The licensee shall submit a final commissioning report related to production of fuel pellets as described in paragraph (i) (a), (iii) of Part IV of this licence that is acceptable to the Commission prior to commencement of commercial production of fuel pellets at the Peterborough facility

15.3 The commercial production of fuel pellets shall be conducted at either the Toronto facility or at the Peterborough facility, but not at both facilities.

24. Conditions 15.1, 15.2, and 15.3 of the Peterborough licence are the subject of this application for judicial review.

(b) CNSC's Decision-Making Framework

25. CNSC's decision to renew BWXT's licence is made pursuant to the *NSCA*, the *Class I Regulations*, the *General Nuclear Safety and Control Regulations*, SOR/2000-202, CNSC's Regulatory Guidance Documents and Canada's international obligations;

26. Subsection 9(a) of the *NSCA* provides:

9 The objects of the Commission are

(a) to regulate the development, production and use of nuclear energy and the production, possession and use of nuclear substances, prescribed equipment and prescribed information in order to

(i) prevent unreasonable risk, to the environment and to the health and safety of persons, associated with that development, production, possession or use

27. Subsection 24(4) of the *NSCA* provides:

24(4) No licence shall be issued, renewed, amended or replaced — and no authorization to transfer one given — unless, in the opinion of the Commission, the applicant or, in the case of an application for an authorization to transfer the licence, the transferee

...

(b) will, in carrying on that activity, make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

28. Sections 3 and 6 of the *Class I Regulations* outline requirements for a Class 1 facility licence application;

3 An application for a licence in respect of a Class I nuclear facility, other than a licence to abandon, shall contain the following information in addition to the information required by section 3 of the *General Nuclear Safety and Control Regulations*:

(a) a description of the site of the activity to be licensed, including the location of any exclusion zone and any structures within that zone;

(b) plans showing the location, perimeter, areas, structures and systems of the nuclear facility;

...

(g) the proposed environmental protection policies and procedures;

(h) the proposed effluent and environmental monitoring programs;

6 An application for a licence to operate a Class I nuclear facility shall contain the following information in addition to the information required by section 3:

(a) a description of the structures at the nuclear facility, including their design and their design operating conditions;

(b) a description of the systems and equipment at the nuclear facility, including their design and their design operating conditions;

(c) a final safety analysis report demonstrating the adequacy of the design of the nuclear facility;

...

(f) the proposed measures to facilitate Canada's compliance with any applicable safeguards agreement;

(g) the proposed commissioning program for the systems and equipment that will be used at the nuclear facility;

(h) the effects on the environment and the health and safety of persons that may result from the operation and decommissioning of the nuclear facility, and the measures that will be taken to prevent or mitigate those effects;

(i) the proposed location of points of release, the proposed maximum quantities and concentrations, and the anticipated volume and flow rate of releases of nuclear substances and hazardous substances into the environment, including their physical, chemical and radiological characteristics;

(j) the proposed measures to control releases of nuclear substances and hazardous substances into the environment;

(c) Legal Grounds

The CNSC failed to fulfil the conditions for issuance of a licence pursuant to s. 24(4) of the NSCA

29. The CNSC's decision to authorize BWXT to move its pelleting operations to Peterborough is invalid and unlawful;
30. In condition 15.1, the CNSC directed BWXT to submit an updated environmental monitoring program at the Peterborough facility prior to the commencement of production of fuel pellets;
31. In condition 15.2, the CNSC directed BWXT to submit a final commissioning report related to production of fuel pellets at the Peterborough facility prior to the commencement of production of fuel pellets;
32. The CNSC found in its decision that BWXT had not provided sufficient information relating to operating performance, quality assurance, safety analysis, physical design and environmental monitoring to support its request to move pelleting operations to Peterborough;
33. Licensees are required to address operating performance, quality assurance, safety analysis and physical design pursuant to subsection 24(4) of the *NSCA* and sections 3 and 6 of the *Class 1 Regulations* in their licence application;
34. Licensees are required to set out a proposed environmental monitoring program to demonstrate that the environment and the public are protected from emissions related to a facility's activities pursuant to subsection 24(4) of the *NSCA* and section 3 of the *Class 1 Regulations* in their licence application;

35. It was unlawful of the CNSC to defer consideration of core licensing requirements by way of licence conditions;
36. The final commissioning report and the updated environmental monitoring program will not be subject to a full, public hearing;
37. The issues which the CNSC has allowed BWXT to address in a future final commissioning report and an updated environmental monitoring program are of critical importance to CARN;

The CNSC lacked sufficient information to make a licensing decision under s.24(4) of the NSCA with respect to protection of the environment

38. The CNSC must be satisfied pursuant to s 24(4) of the NSCA that a licensee will provide adequate provision for the protection of the environment before a licence can be granted;
39. Sections 3 and 6 of the *Class 1 Regulations* outline information that must be included in a licence application;
40. In particular, subsection 3(h) of the *Class 1 Regulations* requires a licence application to include the proposed effluent and environmental monitoring programs;
41. CNSC REGDOC-2.9.1 sets out the CNSC's principles for environmental protection and requirements for licensee environmental protection measures, and also requires licensees to provide a detailed description of structures, systems, and equipment necessary to regulate and control the release of hazardous substances;
42. Section 6(g) of the *Class 1 Regulations* requires that the licence application include the proposed commissioning program for the systems and equipment that will be used at the nuclear facility;
43. BWXT's Environmental Risk Assessment was completed without identifying specific fuel pelletizing equipment;
44. Section 6(j) of the *Class 1 Regulations* requires that the licence application include the proposed measures to control releases of nuclear substances and hazardous substances into the environment;
45. BWXT's Environmental Risk Assessment did not include environmental controls relating to pelleting operations at the Peterborough facility;
46. BWXT's Environmental Risk Assessment also did not include potential hazards or release events relating to pelleting operations at the Peterborough facility;

47. Subsection 6(i) of the *Class 1 Regulations* requires that the licence application include the proposed location of points of release, the proposed maximum quantities and concentrations, and the anticipated volume and flow rate of releases of nuclear substances and hazardous substances into the environment;
48. BWXT's Environmental Risk Assessment does not identify the number of points of release relating to new pelleting operations at the Peterborough facility or their location;
49. It was unlawful and invalid for the CNSC to rely on the Environmental Risk Assessment in its determination of whether the requirement to protect the environment in s.24(4) of the *NCSA* is met;

The CNSC lacked sufficient information to make a decision in four Safety and Control Areas

50. The CNSC relies on fourteen Safety and Control Areas ("SCAs") to assess, evaluate, review and verify whether licensees are meeting all regulatory requirements;
51. BWXT did not provide sufficient information to satisfy the CNSC on all fourteen SCAs with respect to moving its pelleting operations to Peterborough;
52. The CNSC's decision was unreasonable because it made a licensing decision without sufficient information on all SCAs, including the operating performance SCA, the safety analysis SCA, the physical design SCA and the environmental protection SCA;

The CNSC licensing decision failed to consider social and economic factors as required by the ALARA principle

53. The CNSC did not identify any social and economic factors as part of its ALARA analysis;
54. The As Low As Reasonably Achievable ("ALARA") principle is a guiding principle for radiological protection management, requiring that radiation exposure be kept as low as reasonably achievable, taking into account social and economic factors;
55. The ALARA principle is included in subsection 4(a) of the *Radiation Protection Regulations*;
56. The CNSC has also incorporated the ALARA principle into its regulatory guidance, including REGDOC 2.7.1 *Radiation Protection* and REGDOC 2.9.1 *Environmental Protection*;

57. CNSC REGDOC-2.7.1 provides that “The ALARA principle takes into account social and economic factors, and licensees have the overall responsibility of assessing and documenting the justification and rationale for how they will take these factors into account in the application of the ALARA principle in order to substantiate their decisions. Social factors that could be considered include equity, sustainability, individual benefit, social benefit and social trust. In all instances, the views of the public may also be relevant.”
58. CARN raised several serious social and economic considerations in its written and oral submissions including the legacy of illness and contamination left by the General Electric facility formerly at this site and the particular vulnerability of young children at the nearby Prince of Wales Public School to exposures caused by pelleting at the Peterborough facility, which were not addressed by the CNSC;
59. The CNSC did not consider the views of the public in its consideration of ALARA;
60. The CNSC expressly declined to consider community support, local buy-in, social licence or social acceptability;
61. The CNSC did not consider equity or social trust in its consideration of ALARA;
62. The CNSC did not identify any social or economic factors in its analysis of BWXT’s request to move pelleting operations to Peterborough;
63. The decision by the CNSC to authorize pelleting in Peterborough did not meet the requirements of the ALARA principle and is therefore unreasonable;

The CNSC licensing decision failed to apply the principle of justification

64. The CNSC failed to apply the principle of justification;
65. Section 3(a) of the *NSCA* requires consistency with Canada’s international obligations;
66. Section 9(a) of the *NSCA* requires the Commission to prevent unreasonable risk to the environment and to the health and safety of persons, and to achieve conformity with international obligations;
67. Section 24(4) of the *NSCA* requires a licensee to make adequate provision for measures required to implement international obligations to which Canada has agreed;
68. Based on reports by the United Nations’ Scientific Committee of the Effects of Atomic Radiation (“UNSCEAR”), the International Commission on Radiological Protection (“ICRP”) developed the Three Principles of Radiation Protection including the principle of justification;

69. The ICRP defines the principle of justification as “any decision that alters the radiation exposure situation should do more good than harm.”
70. The principle of justification, as recommended by the ICRP, has been taken up by the IAEA in its Safety Standards and as part of its Fundamental Safety Principles, aimed at the protection of health and minimization of danger to life. It accordingly describes the justification principle: “for facilities and activities to be considered justified, the benefits that they yield must outweigh the radiation risks to which they give rise”.
71. Canada is a member of the IAEA and the CNSC is responsible for implementing IAEA safeguards;
72. REGDOC-3.5.3, Regulatory Fundamentals, which outlines the CNSC’s regulatory philosophy and approach to applying the NSCA, refers to the IAEA and ICRP in its discussion of “international obligations”:
73. The principle of justification is found in a wide variety of other international instruments;
74. The principle of justification is customary international law, or in the alternative is international guidance;
75. There is a particularly strong need for justification in cases where vulnerable populations such as children will be exposed to increased levels of toxic substances like radiation;
76. The CNSC’s decision will result in unnecessary exposure to children given the proximity of the facility to an elementary school;
77. BWXT did not consider impacts of exposure specific to children in their licensing materials nor argue that there was any benefit to the children from BWXT’s request for pelleting operations to be moved to Peterborough, or to society at large;
78. No justification was offered by BWXT for the request to transfer pelleting operations to Peterborough;
79. The decision by the CNSC to authorize pelleting in Peterborough did not meet the requirements of the principle of justification and is therefore unreasonable;

The CNSC licensing decision failed to apply the precautionary principle

80. The CNSC failed to apply the precautionary principle;

81. The precautionary principle requires that environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
82. The precautionary principle is customary international law;
83. In circumstances of potentially serious or irreversible environmental harm, the CNSC must only licence activities which prioritize environmental protection, and human health and safety;
84. The decision by the CNSC to authorize pelleting in Peterborough did not meet the requirements of the precautionary principle and is therefore unreasonable;
85. Sections 1, 3 and 6 of the *Class 1 Nuclear Facilities Regulations*, SOR/2000-204;
86. Sections 1, 3, 5, 6 and 12 of the *General Nuclear Safety and Control Regulations*, SOR/2000-202
87. Preamble, sections 3, 9, 21(1)(b.1) and 24 of the *Nuclear Safety and Control Act*, SC 1997, c 9;
88. Subsection 4(a) of the *Radiation Protection Regulations*, SOR/2000-203
89. Such further and other grounds as Counsel may advise and this Honourable Court may permit.

(d) Jurisdiction and Additional Grounds

90. The Federal Court has jurisdiction to hear this application for judicial review and to grant the relief sought pursuant to sections 18 and 18.1 of the *Federal Courts Act*, RSC 1985, c F-7.

This application will be supported by the following material:

1. Affidavit of Peter Harris, to be sworn and served;
2. Material requested pursuant to Rule 317 and produced to the Applicant and to the Court pursuant to Rule 318 of the *Federal Court Rules*.

Rule 317 Request

The Applicant requests the Canadian Nuclear Safety Commission send a certified copy of the tribunal record which is not in the possession of the

Applicant, but is in the possession of the CNSC, to the Applicant and to the Federal Court Registry

3. Such other documentary evidence as Counsel may submit and this Honourable Court may permit.

February 5, 2021



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